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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,501	10/16/2001	John B. Putman	TPI.P.0001	4732

7590 12/23/2003

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EXAMINER

STOCK JR, GORDON J

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 12/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/978,501	PUTMAN ET AL.	
	Examiner	Art Unit	
	Gordon J Stock	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>20020205</u> . | 6) <input type="checkbox"/> Other: . |

DETAILED ACTION

Drawings and Specification

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 28 of Fig. 3. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 5 of Fig. 4. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to for the following informalities: 110 and 112 of Fig. 1 in the description are described as cut surfaces, yet 110 and 112 refer to the actual cut pieces rather than the cut surfaces of the pieces. And Fig. 2 has 110 in the description as a cut surface, yet 110 appears to refer to the whole set-up. Corrections are required.
4. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the

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following is required: in **claim 5** there is no provision for “less than 4 minutes” in the specification; in **claim 6** there is no provision for “rubber contains neither curing agents nor accelerators. Corrections required.

Claim Objections

6. **Claim 8** is objected to for the following informality: “stained” should read –strained-. Correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. **Claims 1 and 7** is rejected under 35 U.S.C. 102(b) as being anticipated by **Meissner (3,640,127)**.

As for **claims 1 and 7**, Meissner in the process of determining stress-strain relationships of solids and viscous liquids discloses the following: subjecting a sample to a dynamic pulling force and cutting the sample while the subjected to the dynamic pulling force and while pulling opposed ends of the sample away from each other (col. 2, lines 20-75). As for the sample being compounded rubber, Meissner states that a crude rubber mixture is tested (col. 5, lines 1-4).

9. **Claim 9** is rejected under 35 U.S.C. 102(b) as being anticipated by **Binzburg et al. (3,897,190)**.

As to **claim 9**, Binzburg discloses a press tool comprising: a base plate (Fig. 6, 42); a press for pressing a hot sample against base plate (col. 12, lines 50-55); and a cooling element cooling base plate (col. 13, lines 6-20).

10. **Claim 10** is rejected under 35 U.S.C. 102(b) as being anticipated by **Meissner (3,640,127)**.

As to **claim 10**, Meissner discloses a device for cutting solid, doughy, molten materials and viscoelastic materials (col. 1, lines -15) that would comprise compounded rubber samples. The device comprises severing devices for cutting that is disposed in gap between first and second clamps (8 of Fig. 1; col. 60-70). And two clamps (7 and 7' of Fig. 1) whereas one 7' may be moved relative to another for tension (col. 4, lines 15-25).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 2, 6, and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Meissner (3,640,127)**.

As for **claim 2**, Meissner discloses everything as above (see **claim 1**). Meissner does not mention the cutting in air. However, the apparatus is not enclosed (Fig. 1) and Meissner does not mention the actions being performed in an evacuated system. Therefore, it would be obvious to one skilled in the art at the time the invention was made that the cutting was done in air for the system is not enclosed nor evacuated.

As for **claim 6**, Meissner discloses everything as above (see **claim 1**). However, he is silent concerning the sample lacking curing agents and accelerators. However, Meissner also does not mention the samples comprising curing agents and accelerators. Meissner states that the samples of solids and viscoelastic materials may be measured (col. 3, lines 10-15). Therefore, it would be obvious to one skilled in the art at the time the invention was made to measure a sample of compounded rubber containing neither curing agents nor accelerators for this sample would be solid and viscoelastic.

As for **claim 8**, Meissner discloses everything as above (see **claim 1**). However, he is silent concerning the strain being five to ten percent. However, the system tests at different rates of extension (col. 4, lines 45-55). Therefore, it would be obvious to one skilled in the art at the time the invention was made that the sample is strained by five to ten percent, for different tensions are used for testing.

13. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Meissner (3,640,127)** in view of **Vegvari et al. (4,220,042)**.

As for **claim 3**, Meissner discloses everything as above (see **claim 1** above). He is silent concerning pressing prior to cutting to free the portion of air. Vegvari in a measurement of dispersion teaches pressing a sample prior to cutting to remove air (col. 4, lines 15-25). Therefore, it would be obvious to one skilled in the art to press the sample prior to cutting in order to free the sample of air. In addition, as for cutting the pressed portion Meissner discloses the testing of samples of solids and viscoelastic materials (col. 3, lines 10-15) and does not disclose air-entrapped materials. It would be obvious to one skilled in the art to press a sample

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and subsequently cut the pressed portion in order to test the actual material accurately without interference by the air impurity.

14. **Claims 4-5** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Meissner (3,640,127)** in view of **Vegvari et al. (4,220,042)** in view of **Ozawa et al. (6,526,859)** and **Binzburg et al. (3,897,190)**.

As for **claims 4-5**, Meissner in view of Vegvari discloses everything as above (see **claim 3** above). However, Meissner in view of Vegvari do not disclose cooling while pressing. Ozawa in a thermoplastic elastomer composition teaches that testing a sample comprises pressing, cooling, and cutting the piece (col. 110, lines 60-65). Therefore, it would be obvious to one skilled in the art to cool the pressed sample in order to have it tested at room temperature. And Binzburg in a press tool for producing shaped pieces teaches that cooling of pressed objects ensures durability and stabilization of shape (col. 7, lines 20-25). Therefore, it would be obvious to one skilled in the art to cool the sample upon pressing in order for it to retain its pressed shape.

As for being under 4 minutes for everything, they are silent concerning this time limit an optimal value of performance that would be determined by the performing the steps. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have the processes take less than four minutes, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

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U.S. Patent 3,975,127 to Munk et al.

U.S. Patent 4,245,517 to Barker et al.

U.S. Patent 5,974,167 to Reszler

Fax/Telephone Numbers

If the applicant wishes to send a fax dealing with either a proposed amendment or a discussion with a phone interview, then the fax should:

- 1) Contain either a statement "DRAFT" or "PROPOSED AMENDMENT" on the fax cover sheet; and
- 2) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

Papers related to the application may be submitted to Group 2800 by Fax transmission. Papers should be faxed to Group 2800 via the PTO Fax machine located in Crystal Plaza 4. The form of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Machine number is: (703) 872-9306

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gordon J. Stock whose telephone number is (703) 305-4787. The examiner can normally be reached on Monday-Friday, 10:00 a.m. - 6:30 p.m.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



gs

December 10, 2003



Zandra V. Smith
Primary Examiner
Art Unit 2877